

filaria; but in the nuclear formation it is the nucleolus that first appears—a fact which it is important to notice, and which is the more striking because M. van Beneden has observed in the adult *G. gigantea* a successive disappearance and reappearance of the nucleoli.

To sum up, the *Gregarina* of the lobster would pass, in the course of its embryonic development, through the following phases:—the Monerian phase, the phase of the generative cytode, that of the pseudofilaria, that of the protoplast, that of the encysted *Gregarina*, and that of psorospermia.

There would therefore be in its evolution two phases during which reproduction would take place by division:—1, that which gives origin to the psorospermia after encystation; 2, that in which the generative cytode produces pseudofilariæ.—*Journal de Zoologie*, tome i. (1872) pp. 134–165; *Bibl. Univ., Arch. des Sci.* July 15, 1872, p. 256.

Diatoms in Hot Springs.

Dr. Blake has collected diatoms at a hot spring in Pueblo valley, Humboldt Co., Nevada, the temperature of which was 163° F. More than fifty different species were recognized by him; and they were found to be mostly identical with the species found in beds of infusorial earth in Utah and described by Ehrenberg, showing that the latter must have been accumulated in a hot lake, of about the same temperature. No other living species were found in the hot waters, excepting red algæ. The deposit was a large one, and in it there were concretions of silica. On making a thin section of one of these concretions, a pair of legs of a coleopterous insect were visible in the quartz; the greater part of the concretion was made up of petrified algæ.

In one of the hot springs at the California geysers, having a temperature of 198° F., he found two kinds of Conferva—one capillary, resembling *Hydrocrocis Bischoffii*, but larger; the other a filament, with globular enlargements at intervals. In another spring, the temperature 174° F., many Oscillariæ were found, which by the interlacement of their delicate fibres formed a semigelatinous mass, and also two diatoms. In the water of the creek of Geysers Cañon, 112° F., the algæ formed layers sometimes 3 inches thick, covering the bottom of the pools, and the same diatoms were found as in the 174° spring. The waters are acidulated by the presence of free sulphuric acid; and Dr. Blake suggests that this may account for the rarity of diatoms.—*Proc. Cal. Acad. Sci.* iv. pp. 183, 189, 193, 197.

On the Habits of Galeodes pallipes. By Prof. COPE.

Prof. Cope exhibited a specimen of a *Galeodes*, probably *G. pallipes* of Say, taken in the town of Denver, Colorado, by Dr. Gehring. According to that gentleman, it was common in that place in houses, and was an enemy and destroyer of the *Cimex lectularius* (bed-bug). In captivity, it showed a preference for them as food, and crushed them in its short falces, preliminary to sucking their juices.—*Proc. Acad. Nat. Sci. Phil.* part iii. p. 295 (1872).